

Claims

1. A method of setting up and/or controlling a multimedia call involving an H.324 enabled user terminal and a circuit switched connection terminating at the user terminal and at a network node, the method comprising:  
5 sending DTMF control signals over the circuit switched connection within H.245 protocol control messages; and  
on the basis of said DTMF control signals, routing or re-routing the connection to an appropriate data source or mapping the connection to an appropriate data source.  
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2. A method according to claim 1 and comprising sending the DTMF control signals within H.245 UII messages.
- 15 3. A method according to claim 1 or 2, wherein said network node is a video gateway.
4. A method according to claim 3 and comprising routing the circuit switched connection through an Intelligent Network node, the Intelligent  
20 Network node initially routing the connection to an appropriate video gateway on the basis of caller number, called number, or called or caller party location.
5. A method according to claim 4 and comprising, at the Intelligent Network node, subsequently re-routing the call to a telephone number located at the  
25 same or a different video gateway on the basis of a DTMF signal contained in an H.245 control message received at the Intelligent Network node.
6. A method according to claim 3 and comprising, at the video gateway, connecting the circuit switched connection to an appropriate packet switched  
30 data source on the basis of a DTMF signal contained in an H.245 control message received at the video gateway.

7. A method according to claim 6, wherein said video gateway comprises a Media Gateway and a Media Gateway Controller, the Media Gateway controller determining on the basis of a received DTMF signal an address of a packet switched data source to which the circuit switched connection should be  
5 connected, and establishing that connection via the Media Gateway.

8. A method according to claim 3 and comprising, at the video gateway, extracting appropriate H.245 control messages and forwarding these messages to a service node, the service node determining, on the basis of a DTMF signal  
10 or signals contained within the forwarded H.245 messages, an address of a packet switched data source to which the circuit switched connection should be connected, establishing a packet switched connection to that data source, and relaying the packet switched data to the video gateway.

15 9. A method according to any one of the preceding claims, wherein said data source is a peer H.324 or H.232 user terminal.

10. A method according to any one of the preceding claims, wherein said data source is a streaming server or video mail server.

20 11. A method according to any one of the preceding claims and comprising mapping a telephone number at which the circuit switched connection is terminated to a Universal Resource Locator identifying said appropriate data source.

25 12. A method according to claim 11 when appended to claim 3 and comprising performing said mapping at the video gateway.

30 13. A method according to any one of the preceding claims, wherein said user terminal is a 3G-324M mobile terminal.

14. A method according to claim 1 or 2, wherein said network node is an

Intelligent Network node.

- 15      15.      A method of operating an Intelligent Network node of a communications network, the method comprising receiving DTMF signals contained within H.245 control messages sent from a user terminal over a circuit switched connection, mapping the DTMF signals to associated telephone numbers terminating at a video gateway, and routing or re-routing the connection to the video gateway on the basis of the determined telephone numbers.
- 10      16.      A method of operating a video gateway of a communications network, the method comprising receiving one or more DTMF signals contained within an H.245 control message sent from a user terminal over a circuit switched connection, mapping the DTMF signal(s) to an address of packet switched data sources, and coupling the circuit switched connection to said data source over a packet switched network.
- 15      17.      A method of operating a video gateway of a communications network, the method comprising terminating a circuit switched connection from an H.324 user terminal, receiving H.245 control messages multiplexed onto said connection using H.223, demultiplexing the H.223 stream to recover H.223 messages containing DTMF control signals, and forwarding these H.223 control messages to a service node disposed between the video gateway and a packet switched data source.
- 25      18.      A method of operating a service node of a communications network, the service node being disposed between a video gateway and a packet switched data source, the method comprising receiving H.245 control messages from the video gateway, recovering from the H.245 control messages DTMF control signals provided by a user terminal, mapping one or more of the DTMF control signals to an address of the data source, receiving data from said data source over a packet switched network and forwarding the data to the video gateway.
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19. A method of setting up and/or controlling a multimedia call involving a user terminal and a circuit switched connection between the user terminal and a video gateway, the method comprising:

routing circuit switched related signalling to an Intelligent Network, IN,  
5 node, with user initiated DTMF signals being contained within H.245 messages;  
and

at the IN node, detecting H.245 messages containing DTMF signals, and  
causing the service logic at the IN node to set up and/or control the circuit  
switched connection to the video gateway in accordance with the received  
10 DTMF signals.

20. A method of delivering streaming data over a circuit-switched access network from a packet-switched streaming server to a mobile wireless terminal, the method comprising:

15 at an Intelligent Network node, selecting a telephone number allocated to a video gateway;

sending a call setup message from said Intelligent Network node to said telephone number and establishing a circuit switched connection between said terminal and the video gateway;

20 at the video gateway, identifying a packet-switched network address associated with said telephone number; and

receiving streaming data from said packet-switched network address, and forwarding the data to said terminal over said circuit-switched connection.